

Invited comment on Morgan et al.: Transparent cap colonoscopy versus standard colonoscopy: a systematic review and meta-analysis

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I read with great interest the systematic review and meta-analysis by Morgan et al. [1] on the results of transparent cap colonoscopy versus standard colonoscopy, including 14 randomized controlled trials and a total of 6,713 patients. It is a good opportunity for us to strongly recommend this report to readers and to highlight some issues associated with it. The colorectal cancer miss rate is without doubt the weak point of colonoscopy particularly as regards cancer screening and the adenoma detection rate. Given this, all technical progress, even if minimal, is welcome. Twenty years have passed since Inoue first described the use of a cap in colonoscopy. A lot of effort was put into the evaluation of this device. For example, it is known that a shorter cap is associated with a higher polyp detection rate and a longer cap with faster caecal intubation. Caps provide important benefits: they maintain good visualization of the lumen during the procedure making it easier to pass through bends and it facilitates visualization of the “blind” mucosal areas such as those behind the semilunar folds or under the ileocecal valve. Despite this evidence, studies of cap-assisted colonoscopy still report conflicting clinical results. The use of caps is associated with a statistically significant reduction in time to caecal intubation, but not a better caecal intubation or polyp detection rate, as confirmed in other two meta-analyses [2, 3]. Moreover, the average reduction in time to caecal intubation of only 48 s shown in the present meta-analysis does not make it possible to put more patients on the endoscopy list. In another meta-analysis [4] of 14 studies comprising 1,629 patients, the pooled adenoma detection rate in cap-assisted colonoscopy was 46.6 % (385/827)

compared with 40.3 % (323/802) in standard colonoscopy, but the main difference was in the detection of diminutive adenomas. Seventeen cap-assisted colonoscopies are needed to diagnose one more small adenoma, but we have to balance the cost of a single disposable cap with the oncogenic potential of a diminutive polyp. These polyps are found in 2.5 out of 5,120 colonoscopies and are reported mainly in Japanese series [5].

The cap on demand, to be used only in cases of suspicious “blind spots” or for beginners managing difficult flexures, may be the right answer to the question “to cap or not to cap?” considering the usefulness of cap-assisted colonoscopy in removing adenomas located behind the semilunar folds. Therefore, the armamentarium of a skilled and proficient endoscopist should always include the cap.

Conflict of interest None.

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